

Applicants: Yuan Chang et al.  
Serial No.: 09/607,179  
Filed : June 29, 2000  
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In view of the arguments set forth below, applicants maintain that the Examiner's objections and rejections made in the August 10, 2002 Final Office Action have been overcome, and respectfully request that the Examiner reconsider and withdraw same.

**The Claimed Invention**

This invention provides an isolated peptide encoded by at least a portion of a nucleic acid molecule with a sequence as set forth in any of SEQ ID NOS:2-37, and that uniquely defines a herpesvirus associated with Kaposi's sarcoma. This invention also provides a composition which comprises the instant isolated peptide and a carrier.

**Rejection Under 35 U.S.C. §112, First Paragraph**

The Examiner rejected claims 50 and 51 under 35 U.S.C. §112, first paragraph, as allegedly containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the art that the inventors, at the time the application was filed, had possession of the claimed invention. Applicants understand the Examiner's rejection to apply to new claims 52 and 53 corresponding, respectively, to canceled claims 50 and 51.

In response, applicants respectfully traverse the Examiner's rejection, pointing out that the invention of claims 52 and 53, as amended, and as clearly supported by the specification, could readily be made and used by one skilled in the art.

In view of the above remarks, applicants maintain that claims 52 and 53 satisfy the requirements of 35 U.S.C. §112, first paragraph.

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Summary

In view of the remarks made herein, applicants maintain that the claims pending in this application are in condition for allowance. Accordingly, allowance is respectfully requested.

If a telephone interview would be of assistance in advancing the prosecution of the subject application, applicants' undersigned attorneys invite the Examiner to telephone them at the number provided below.

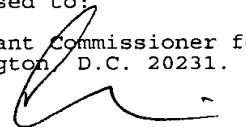
No fee, other than the enclosed extension fee, is deemed necessary in connection with the filing of this Amendment. However, if any additional fee is required, authorization is hereby given to charge the amount of such fee to Deposit Account No. 03-3125.

Respectfully submitted,



I hereby certify that this correspondence is being deposited this date with the U.S. Postal Service with sufficient postage as first class mail in an envelope addressed to:

Assistant Commissioner for Patents  
Washington, D.C. 20231.

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The KS330Bam sequence is an internal portion of a [n] 918 bp ORF with 55-56% nucleotide identity to the ORF26 and BDLF1 genes of HSVSA and EBV, respectively (SEO ID NO:46 and 47, respectively). The EBV and HSVSA translated amino acid sequences for these ORFs demonstrate extensive homology with the amino acid sequence encoded by the KS-associated 918 bp ORF (Figure 6). In HSVSA, the VP23 protein is a late structural protein involved in capsid construction. Reverse transcriptase (RT)-PCR of mRNA from a KS lesion is positive for transcribed KS330Bam mRNA and that indicates that this ORF is transcribed in KS lesions. Additional evidence for homology between the KS agent and herpesviruses comes from a comparison of the genomic organization of other potential ORFs on the 9404 bp sequence (Figure 3A). The 5' terminus of the sequence is composed of nucleotides having 66-67% nucleotide identity and 68-71% amino acid identity to corresponding regions of the major capsid protein (MCP) ORFs for both EBV and HSVSA. This putative MCP ORF of the KS agent lies immediately 5' to the BDLF1/ORF26 homolog which is a conserved orientation among herpesvirus subfamilies for these two genes. At the 3' end of this sequence, the reading frame has strong amino acid and nucleotide homology to HSVSA ORF 27. Thus, KS-associated DNA sequences at four loci in two separate regions with homologies to gamma herpesviral genomes have been identified.